It is difficult to say at what season of the year it would be best to commence the short course, but I am inclined to say not earlier than April, as the climate in North Germany is very raw and severe, and few forest operations can be carried on when the ground is covered with snow, although I did miss a forest survey in Hanover by not arriving even sooner than I did (the middle of March), which I much regretted. It is impossible in so short a time to see everything, and if you are at Hanover in the proper season you will be at Rippoldsau when comparatively little is going on, and *vice versâ*.

Difficulties and discomfort to be expected at first.

Above all let no forest officer imagine he is starting on a mere pleasure trip, and will find everything *comfortable* and to his taste. He will find there is a great deal of roughing it in a shape which I think the most difficult to accommodate oneself to, strange and unpalatable food, want of cleanliness and comfort, and a perfect change in the mode of life, habits, and associates to what one has been accustomed to in England. I would particularly counsel the undertaking of no tours or expeditions until a little shaken down, at home with the language, and accustomed to the mode of life and style of food and lodging to be met with in a German village inn. I mention this as I spent much valuable time in making such tours at the outset, and derived little or no benefit.

Again, visitors must expect to be shown the same thing over and over again, which, although tiresome and seemingly useless, does good, I am convinced, in the end in firmly impressing things on one's memory.

I append tabular statements showing the extent under forest in proportion to total area, population, &c. in the principal German states, the figures in which are taken from *Bernhardt's Forststatistik Deutschlands*, to which work, *Die Forst Verwaltung Bayerns*, and Director Burckhardt's publications, I am indebted for much valuable information.

SPECIMEN OF HEADINGS INTO WHICH THE SKETCH OR PREFACE OF WORKING PLAN MAY BE DIVIDED (referred to at page 7).

PART FIRST.—Existing arrangements and circumstances of the forest.

1. Extent and situation. 2. Measurements, when and by whom taken, &c. 3. Boundaries. 4. Roads. 5. Local conditions, communal rights and privileges, and present state of the forest. 6. Yield and disposal of the produce.

PART SECOND.

(*a.*) General working plan proposed.

1. Description and class of timber to be grown and with what object in view. 2. *Umtrieb* or rotation of crop, which varies according to description of timber, and whether grown as *Hoch*, *Mittel*, or *Nieder Wald*. (See note below). 3. Division and subdivision of the forest with reference to the *Umtrieb* and *Umtrieb Zeit*.

(*b.*) Special working plan or regulations proposed.

(1.) 1st. Complex treatment of the oak Hochwald.
2nd. do. do. of the beech do.
3rd. do. do. of the oak and beech *Mittel* and *Nieder Wald*.
4th. do. do. of the spruce and Scotch fir Hochwald.

(2.) The *état* or estimated annual yield of the several complexes and of the whole forest.

(3.) Improvement of the forest, soil, roads, &c., noting the leading points to be attended to during the next 20 years, *e.g.*—
a. Pushing on the construction of roads in certain parts.
b. Planting or sowing up vacant spots now unproductive.
c. Removal of the worthless or less valuable descriptions of trees in certain blocks, and planting of spruce and fir. Further planting of clearings where the natural reproduction has more or less failed (specifying the exact localities in both instances).
d. Thinning, particularly in the mature and too thickly covered portions (to be specified), &c. &c.

PART THIRD.—General and concluding remarks explanatory of the accompanying detailed working plan and maps for the guidance of the executive.

Note.—It is difficult to find exact synonyms for many of the German forest terms, but the following, as used by Dr. Brandis, may be adopted:—

*Hoch-wald	High timber forest or high forest.
Mittel-wald	Coppice, with standard trees.
Niedef-wald	Coppice.
Umtrieb	Rotation.
Umtriebs-zeit	Length of rotation.
Einrichtungs Wirtschafts Plan	Plan of operations, or working plan.
Oberförsterei or Revier	Forest district or range managed by an ober or revier förster.
Forst-bezirk	Forest circle or division supervised by a Forst-meister.
Massenaufnahmen	Forest valuation surveys.
Vorbereitung's Schlag Besammung's ,, Dunkel ,, Licht ,,	Terms applied to the several stages of clearing for reproduction.

* The term is used to denote plantations or woods, at any period of their growth, which are to be left till mature, whether for timber or firewood supply; which are to be reproduced from seed, and in which the mature wood will constitute the chief object (*Haupt nutzung*); whereas in Mittelwald the coppice is equally if not chiefly the aim.

STATEMENT showing the FOREST AREA in proportion to the total extent and population in six of the largest GERMAN STATES and in the whole GERMAN EMPIRE.

1	2	3	4	5	6	7	8	9
Name of State.	Extent in Hectars.	Population per latest Census.	Extent of Forest.			Proportion of Forest to total extent per 100 Hectars.	Forest area per head of Population.	Remarks.
			Under State Management.	Private.	Total.			
			hectars.	hectars.	hectars.	hectars.	hectars.	
Prussia - -	34,831,924	24,019,567	3,803,388	4,333,965	8,137,353	23·4	·339	The hectar is 2·4711431 English acres.
Bavaria - -	7,585,738	4,824,421	1,332,962	1,263,869	2,596,831	34·4	·536	The sources of information made use of in compiling this statement are, Leo's Forst Statistik, Die Forst Verwaltung Baierns, Bernhardt's Forst Statistik.
Wurtemberg -	1,950,597	1,778,396	399,169	195,933	595,102	30·5	·335	The forests classed as under State management (col. 4) include State, communal, and ecclesiastical forests.
Baden - -	1,530,967	1,434,970	349,267	161,657	510,924	33·4	·356	
Saxony - -	1,496,644	2,423,401	192,370	280,049	472,419	31·6	·195	I have retained the *hectar* in this statement, as it is the land measure now universal in Germany, and supersedes the various *morgens*, *ackers*, and *tagwerks*, which were formerly so perplexing.
Mecklenburgh Schwerin.	1,344,078	560,618	115,321	48,246	163,567	12·2	·292	
German Empire	54,102,769	40,089,170	7,247,862	6,692,679	13,940,541	25·7	·348	The total area per head of population in the German Empire is thus 1·3 hectars, of which ·348 hectars is woodland.

STATEMENT showing the actual extent of purely STATE FOREST in some of the GERMAN STATES and the AUSTRIAN EMPIRE, with the yield per Acre, and explanatory Remarks.

1	2	3	4	5
Name of State.	Area of Purely State Forests, in English Acres.		Yield per English Acre, calculated on Column 2.	REMARKS.
	Productive.	Unproductive.		
			cubic feet.	
Prussia - -	5,836,100	666,175	34·5	
Saxony - -	378,555	15,614	72·5	
Bavaria - -	2,079,835	238,788	63	
Wurtemberg -	469,087	—	84·7	
Baden - -	212,770	18,817	80·6	
Austrian Empire	1,576,699	653,347	41	

The figures for Prussia, Wurtemberg, and Baden are taken entirely from *Bernhardt's Forstatistik* (1872); for Saxony, from the *Tharander Forstliches Yahrbuch* (1870); and for Bavaria, from the *Forststatistische Mittheilung* (1869). The unproductive area in Wurtemberg is not given by Bernhardt. For Austria I have taken the figures given in the latest annual report. From this table the average yield of the Prussian State Forest would appear low in comparison with other States, and there is no doubt that, owing to circumstances of soil and climate, the yield is below that of Saxony and Bavaria and the Black Forest. The great extent of the Prussian Kingdom must be taken into account, but still more the accurate nature of the statistics, which are for the year 1871, whilst those for Wurtemberg are for 1860, and Baden, 1856, no later data being given by Bernhardt. The yield in Prussia is greater in the western than in the eastern provinces, and varies very widely; thus we have the provinces of Danzig and Marienwerder with a yield of only 20 cubic feet per English acre; Bromberg, Minden, and Cöslin with 23; whilst Hanover, Aachen, and Wiesbaden are all over 50, and Erfurt 56·5 cubic feet. Again, the areas in columns 2 and 3 are classed for Prussia as "devoted to the rearing of timber," and "not devoted to the rearing of timber," and I imagine that under column 2 a considerable extent of moor and really uncultivated area is included, whereas in the smaller States (Wurtemberg and Baden) only the area actually under crop is taken into account. For these reasons I am inclined to reject the figures for these two States altogether. The Austrian yield is also very doubtful, and the large proportion of unproductive to productive area is a noteworthy feature. As regards Bavaria, the system of calculation in "*klafters*" and "*wellenhunderts*" makes it difficult to arrive at accurate results, and I may mention that Bernhardt makes the Bavarian yield only 45 cubic feet per acre. For Saxony I believe the figures to be accurate, and there is no doubt that the Saxon yield is high, and steadily increasing, having been 60·4 cubic feet in 1854, 67·6 cubic feet in 1863, and now (1870) 72·5 cubic feet per English acre. Even with regard to this State, however, there is an element of uncertainty in the figures given, as Judeich, in Table 1 of the Jahrbuch, gives the yield first as 1·23 klafters of 100 cubic feet per Saxon acre, = 89 cubic feet per English acre; and, second, 5·04 forst-metre per hectar, = 72·5 cubic feet per English acre, which latter figures I have retained as above.